

Examiner's Notes

| 1 | 5 | 10 | 15 |
|---|-------------------------------------|---------|-----|
| Gln Arg Glu Tyr Leu Leu Asn Leu Phe Arg | Glu Arg Gly Val | Gln Tyr | |
| 20 | 25 | 30 | |
| Leu Val Gly Ala Gly Asp Gly Ala Glu | Ala Leu Arg Cys Leu Lys Gln | | |
| 35 | 40 | 45 | |
| Asp Arg Phe Asp Leu Ile Leu Ser Asp Leu | Met Met Pro Gly Met Asp | | |
| 50 | 55 | 60 | |
| Gly Ile Gln Met Ile Leu Gln Leu Pro | Tyr Leu Lys His Arg Pro Lys | | |
| 65 | 70 | 75 | 80 |
| Leu Ala Leu Met Ser Ser Ser Gln Arg | Met Met Leu Ser Ala Ser | | |
| 85 | 90 | 95 | |
| Arg Val Ala Gln Ser Leu Gly Leu Ser | Val Ile Asp Leu Leu Pro Lys | | |
| 100 | 105 | 110 | |
| Pro Thr Leu Pro Lys Ala Ile Gly Gln | Leu Leu Glu His Leu Glu Arg | | |
| 115 | 120 | 125 | |
| Cys Leu Arg Gln Lys Leu Glu Pro | Glu Thr Asp Glu Thr Pro His Gly | | |
| 130 | 135 | 140 | |
| Arg Thr Ala Leu Leu Asp Ala Leu His | Asn Glu Gln Leu Val Thr Trp | | |
| 145 | 150 | 155 | 160 |
| Phe Gln Ala Lys Lys Ser Leu His | Thr Gly Arg Ile Val Gly Ala Glu | | |
| 165 | 170 | 175 | |
| Ala Leu Ile Arg Trp Ser His Pro | Gln His Gly Leu Leu Leu Pro Ser | | |
| 180 | 185 | 190 | |
| Cys Phe Met Ser Asp Val Asp Ala | Thr Gly Leu His Glu Ala Leu Leu | | |
| 195 | 200 | 205 | |
| Trp Arg Val Leu Glu Gln Thr Leu Asn | Ala Gln Glu Ser Trp Arg Arg | | |
| 210 | 215 | 220 | |
| Ala Gly Tyr Glu Ile Pro Val Ser Val | Asn Leu Pro Pro His Leu Leu | | |
| 225 | 230 | 235 | 240 |
| Asp Asn Gln Glu Leu Pro Asp Arg | Leu Tyr Glu Tyr Val Gly Ala Arg | | |
| 245 | 250 | 255 | |
| Gly Ala Cys Thr Ser Ser Leu Cys | Phe Glu Leu Thr Glu Ser Ser Val | | |
| 260 | 265 | 270 | |
| Thr Thr Leu Ser Ser Asn Tyr | Tyr Ala Gly Ala Cys Arg Leu Arg Met | | |
| 275 | 280 | 285 | |
| Lys Gly Phe Gly Leu Ala Gln Asp | Asp Phe Gly Gln Gly Tyr Ser Ser | | |
| 290 | 295 | 300 | |
| Phe Tyr Asn Leu Val Thr Thr Pro | Phe Thr Glu Leu Lys Ile Asp Arg | | |
| 305 | 310 | 315 | 320 |
| Ser Leu Val Gln Gly Cys Val Glu | Asp Asn Gly Leu Asn Ala Ala Val | | |
| 325 | 330 | 335 | |
| Ile Ser Cys Ile Glu Leu Gly His | Arg Leu Asn Leu Asp Val Val Ala | | |
| 340 | 345 | 350 | |
| Glu Gly Val Glu Thr Cys Glu | Glu Leu Asn Leu Leu Arg Arg Leu Gly | | |
| 355 | 360 | 365 | |
| Cys Asp Arg Ala Gln Gly Phe | Leu Ile Ser Lys Ala Val Ser Ala Arg | | |
| 370 | 375 | 380 | |
| Glu Phe Glu Arg Gln Leu Arg | Glu Asp Gly Pro Ser Leu Leu Val | | |
| 385 | 390 | 395 | |

<210> 141
 <211> 1084
 <212> PRT
 <213> Pseudomonas aeruginosa

<400> 141

Val Lys Ser Ala Ser Ala Leu Glu His Asp Asn Lys Leu Leu Lys
 1 5 10 15

NO motif

Trp Thr Thr Leu Ser Gln Ser Leu Ser Ile Gly Leu Ile Cys Val Val
 20 25 30
 Val Leu Thr Val Leu Leu Phe Ser Ile Cys Tyr Trp Ser Leu Gly Arg
 35 40 45
 Leu Phe Gln Glu Glu Glu Asp Lys Val Ser Phe His Phe Thr Arg Met
 50 55 60
 Met Asp Val Ile Arg Glu His Glu Val Phe Leu Gly Arg Ile Ala Arg
 65 70 75 80
 Lys Ser Asp Lys Thr Thr Gln Lys Tyr Asp Tyr Asp Val Val Pro Leu
 85 90 95
 Gln Arg His Leu Ala Lys Glu Asn Gly Leu Ala Val Tyr Gly
 100 105 110
 Arg Glu Phe Ser Phe Ala Met Pro Phe Leu Leu Ala Thr Lys His Ala
 115 120 125
 Leu Ser Ala Asp Ser Ser Gly Asp Pro Phe Ser Leu Gly Val Leu Leu
 130 135 140
 Ala Asn Phe Tyr Gly Ser Phe Trp Ser Val Ser Ala Tyr Pro Ala Pro
 145 150 155 160
 Gln Leu Leu Ile Phe Asp Leu Ser Gly Ser Thr Arg Leu Ala Val Pro
 165 170 175
 Ser Ile Pro Ser Thr Ala Gln Arg Asp Arg Leu Ser Gly Ser Tyr Pro
 180 185 190
 Met Ile Val Glu Arg Ile Leu Ala Arg Leu Arg Thr Arg Pro Val Gly
 195 200 205
 Glu Asp Ala Gln Arg Val His Trp Ile Arg Ala Asp Arg Tyr Arg Asp
 210 215 220
 Ser Ala Leu Glu Met Leu Gly Val Ala Arg Val Asp Leu Pro Glu Thr
 225 230 235 240
 Leu Trp Trp His Asp Glu Pro Asn His Leu Ile Ile Ala Ala Ser Leu
 245 250 255
 Leu Asp Leu Arg Arg Ile Asn Asp Phe Glu Gln Leu Val Glu Arg Pro
 260 265 270
 Ala Phe Asp Ser Tyr Ser Leu Val Ser Pro Asp Gly Glu Val Leu Leu
 275 280 285
 Gly Ala Ala Pro Ala Thr Gly Leu Arg Asp Gly Leu Asn Leu Thr Arg
 290 295 300
 Gln Gly Val Ala Val Gln Leu Leu Ser Gln Pro Glu Asn Gly Trp Leu
 305 310 315 320
 Ala Val Tyr Arg Thr Asp Tyr Gly Asn Phe Phe Arg His Ser Arg Trp
 325 330 335
 Leu Val Ala Gly Leu Leu Leu Thr Pro Ala Leu Leu Ala Gly Trp
 340 345 350
 Leu Gly Met Arg Trp Tyr Thr Ser Ser Val Val Asn Pro Val His Arg
 355 360 365
 Ala His Arg Gln Leu Val Glu Ser Asp Thr Phe Ser Arg Thr Leu Ile
 370 375 380
 Gln Thr Ala Pro Val Ala Leu Val Val Leu Thr Gln Asp Asp Gln Gln
 385 390 395 400
 Leu Val Thr Cys Asn His Leu Ala Ala Gln Trp Leu Gly Gly Pro Thr
 405 410 415
 Glu Ile Leu Gly Leu Thr Ser Asn Trp Lys Leu Phe Asp Ala Arg Gly
 420 425 430
 Gln Val Pro Gly Asp Ile Cys Ile Gln Val Gly Gly Arg Tyr Leu Gln
 435 440 445
 Thr Ala Phe Ala Ala Thr Arg Tyr Ala Gly Thr Glu Ala Val Leu Cys
 450 455 460
 Val Phe Asn Asp Ile Thr Val His Cys Glu Ala Glu Thr Ala Leu Ser
 465 470 475 480
 Asn Ala Lys Arg Ala Ala Asp Ala Ala Ser Gln Ala Lys Thr Leu Phe

| 485 | 490 | 495 |
|--|---------------------|-----|
| Leu Ala Arg Met Ser His Glu Ile Arg Thr Pro Leu Tyr | Gly Val Leu | |
| 500 | 505 | 510 |
| Gly Thr Leu Glu Leu Leu Asp Leu Thr Thr Leu Asn Glu Arg Gln Arg | | |
| 515 | 520 | 525 |
| Ala Tyr Leu Arg Thr Ile Gln Ser Ser Ser Ala Thr Leu Met Gln Leu | | |
| 530 | 535 | 540 |
| Ile Ser Asp Val Leu Asp Val Ser Lys Ile Glu Ala | Gly Gln Met Ala | |
| 545 | 550 | 560 |
| 555 | | |
| Leu Thr Leu Ala Ala Phe Asn Pro Leu Asp Leu Val Arg Glu Val Leu | | |
| 565 | 570 | 575 |
| Gly Asn Phe Ala Ala Ser Ala Met Ala Lys Asp Leu Gln Phe Tyr Ala | | |
| 580 | 585 | 590 |
| Cys Ile Asp Thr Glu Val Pro Ala Gln Leu Ile | Gly Asp Val Thr Arg | |
| 595 | 600 | 605 |
| Ile Arg Gln Val Leu Asn Asn Leu Val Asn Asn Ala Leu Lys Phe Thr | | |
| 610 | 615 | 620 |
| Asp Ile Gly Arg Val Val Leu Arg Val Lys Leu Leu Ser Arg Asn Asp | | |
| 625 | 630 | 635 |
| 640 | | |
| Gly Arg Ala Leu Leu Gln Trp Gln Val Ala Asp Thr | Gly Ile Gly Ile | |
| 645 | 650 | 655 |
| Ala His Glu Gln Gln Glu Arg Leu Phe Glu Ala Phe Tyr Gln Val Ser | | |
| 660 | 665 | 670 |
| Gly Ala His His Ala Gly Gly Thr Gly Leu Gly Leu Ser Ile Cys Trp | | |
| 675 | 680 | 685 |
| His Leu Ala Glu Met Met Gly Gly His Leu Arg Met Val Ser Glu Thr | | |
| 690 | 695 | 700 |
| Gly Leu Gly Ser Ser Phe Ser Leu Val Leu Glu Leu Pro Glu Asp Glu | | |
| 705 | 710 | 715 |
| 720 | | |
| Gln Ser Gly Leu Ala Cys Arg Pro Gly Leu Leu Lys Ser Ala Cys Val | | |
| 725 | 730 | 735 |
| His Val Arg Ser Pro Val Arg Glu Leu Ala Asp Ser Val | Gly Ala Trp | |
| 740 | 745 | 750 |
| Leu Lys Ala Trp Gly Cys Lys Val Ser Ser Gly Glu Ala Ala Pro Ser | | |
| 755 | 760 | 765 |
| Glu Leu Glu Thr Cys Val Leu Leu Glu Leu Leu Pro Met Ala Ala Gly | | |
| 770 | 775 | 780 |
| Pro Ala Ser Ser Pro Trp Pro Gly Pro Arg Val Arg Ala Ser Met Asp | | |
| 785 | 790 | 795 |
| 800 | | |
| Ala Pro Cys Gln Pro Glu Leu Arg Glu Asp Gly Trp Arg Val Gly Leu | | |
| 805 | 810 | 815 |
| His Asn Leu Ala Gly Ile Gly Gln Ala Leu Ala Gln Ala Leu Gly Gly | | |
| 820 | 825 | 830 |
| Asp Ile Pro Glu Gln Thr Pro Ala Asn Ala Cys Ala Arg Ser Gly Arg | | |
| 835 | 840 | 845 |
| Leu Asp Leu Glu Val Leu Val Ala Glu Asp Asn Pro Val Asn Gln Ala | | |
| 850 | 855 | 860 |
| Leu Leu Arg Glu Gln Leu Glu Leu Gly Cys Arg Val Ser Leu Ala | | |
| 865 | 870 | 875 |
| 880 | | |
| Gly Asp Gly Arg Gln Ala Leu Gln Leu Phe Asp Ser Gly Arg Phe Asp | | |
| 885 | 890 | 895 |
| Leu Leu Leu Ser Asp Val Asn Met Pro Asn Met Thr Gly Tyr Glu Leu | | |
| 900 | 905 | 910 |
| Thr Gln Ala Leu Arg Glu Arg Gly Glu Thr Leu Pro Ile Ile Gly Val | | |
| 915 | 920 | 925 |
| Thr Ala Asn Ala Leu Arg Glu Gly Glu Arg Cys Arg Ala Val Gly | | |
| 930 | 935 | 940 |
| Met Asn Ser Trp Leu Val Lys Pro Ile Thr Leu His Thr Leu His Glu. | | |
| 945 | 950 | 955 |
| | | 960 |

Brackets
Wrong
Orientation

brackets

b. 115.

Leu Leu Ser Glu Phe Ala Arg Ala Gly Val Val Leu Pro Ala Gln Ala
 965 970 975
 Arg Asp Leu Gly Pro Pro Ala Gln Leu Asp Asp Gly Leu Ser Pro Gln
 980 985 990
 Val Pro Glu Arg Met Arg Ala Leu Phe Leu Glu Thr Met Gly Lys Asp
 995 1000 1005
 Leu Glu Ala Ala Arg Gln Ala Ile Arg Arg Asn Asp Pro Lys Gly Leu
 1010 1015 1020
 Gln Gln Asp Leu His Arg Met Ala Gly Ser Leu Ala Val Met Arg Ala
 1025 1030 1035 1040
 Arg Thr Leu Val Val Met Cys Gln Gly Ala Glu Glu Gly Leu Leu Glu
 1045 1050 1055
 Ser Arg Leu Glu Cys Ser Ala Val Glu Ile Gly Glu Val Leu Val His
 1060 1065 1070
 Ile Glu Gln Ala Leu Glu Phe Val Arg Lys Thr Gly
 1075 1080

<210> 142
 <211> 231
 <212> PRT
 <213> Pseudomonas aeruginosa

<400> 142
 Met Arg Pro Gly Ser Ile Val Gly Ile Arg Thr Gln Glu Lys Pro Met
 1 5 10 15
 Ser Lys Leu Lys Ile Val Leu Ala Asp Asp His Pro Ile Val Arg Met
 20 25 30
 Gly Val Cys Asp Met Leu Glu Arg Asp Gly Arg Phe Glu Val Val Gly
 35 40 45
 Glu Ala Ser Thr Pro Ser Glu Leu Val Glu Val Cys Arg Gln Ser Glu
 50 55 60
 Pro His Ile Ala Ile Thr Asp Tyr Ser Met Pro Gly Asp Glu Arg Tyr
 65 70 75 80
 Gly Asp Gly Leu Lys Leu Ile Asp Tyr Leu Leu Arg Asn Phe Pro Arg
 85 90 95
 Thr Lys Val Leu Ile Phe Thr Met Val Gly Asn Arg Leu Ile Leu Asp
 100 105 110
 Ser Leu Tyr Asp His Gly Val Ser Gly Val Val Leu Lys Ser Gly Glu
 115 120 125
 Leu Asp Glu Leu Leu Ala Leu Asp Val Val Lys Gln Asn Arg Val
 130 135 140
 Tyr Arg Gly Ala Asn Met Leu Asp Pro Thr Ser Val Leu Ala Asn Arg
 145 150 155 160
 Asp Glu Val Glu Ser Arg Phe Ala Arg Leu Ser Met Lys Glu Phe Glu
 165 170 175
 Val Leu Arg His Phe Val Ser Gly Ser Asn Val Cys Asp Ile Ala Arg
 180 185 190
 Leu Leu Lys Arg Ser Val Lys Thr Val Ser Thr Gln Lys Val Ser Ala
 195 200 205
 Met Arg Lys Leu Glu Val Asn Ser Asp Gln Ala Leu Met Thr Phe Cys
 210 215 220
 Val His Ala Asn Leu Phe His
 225 230

<210> 143
 <211> 238
 <212> PRT